

Remarks/Arguments:

Claims 3-6, 9-10, 13-16 and 19-26 are pending in the present application, all of which are rejected in the Office Action of October 31st, 2005 as being obvious. Of those claims, the referenced Office Action rejects claims 3-6, 9-10, 13-16, and 19-24 as being obvious over Vimpari (US 6577671) in view of Hasegawa (5432814), Nakajima (5487083), and Ögren (US 6795689); and rejects claims 25-26 as being obvious over Vimpari, Hasegawa, Nakajima and Ögren in further view of Magnusson (US 6163689). The undersigned notes that the text of the Office Action at pages 2-3 and 8 cites to Hasegawa as US Pat. No. 6577671 but the attached PTO-892 properly recites Hasegawa as US Pat. No. 5432814.

Claims 3-6, 9, 13-16, 19, 21, and 25-26 are amended herein to recite (in slightly varying language) that the hopped sub-set of spreading codes and the hop sequence used in a first cell differ from the hopped sub-set of spreading codes and the hop sequence used in an adjacent cell. Support for this amendment may be found most concisely at page 3 lines 14-15 as the preferred embodiment. Whereas Ögren discloses at col. 5 lines 20-23 that different cells may use different spreading codes, no reference is seen to use a different hopping sequence in adjacent cells, and neither is any reference or combination thereof seen to teach or suggest using a different hopping sequence to hop within a set of spreading codes that differs from both spreading codes and a hopping sequence used in an adjacent cell. These claims are further amended to clarify language, such as replacing the term “larger set of spreading codes” with the term “first set of spreading codes”. Dependent claim 24 is amended to recite that the relevant subscriber stations are within the first cell, to avoid the implication that hops in adjacent cells are done at the same symbol boundaries as used in the first cell. Claims 25-26 are amended to depend from claims 21 and 6 respectively, reciting that the codes are orthogonal Walsh-Hadamard codes. These claims are seen to be in condition for allowance.

Claims 10 and 20 are not amended except to delete a comma in each claim. In the Office Action, the Examiner rejected these as having similar scope to claim 9, which recites a symbol rate of one of the lowest symbol rate users. The Applicant disagrees. Claims 10 and 20 each recite in relevant part: “periodically hopping changes from a currently used spreading code to a next spreading code at the symbol rate or at a multiple of the symbol rate of the lowest spreading gain users”. The comma is deleted to avoid the implication that the first-recited “symbol rate” may be read independently of the “lowest spreading gain users”. These

claims now unequivocally bind the symbol rate or multiple thereof to the lowest spreading gain user. If the rejections to claims 10 and 20 was predicated on the first-recited "symbol rate" being independent of the lowest spreading gain user, these rejections are seen as overcome.

In the event those rejections were not so predicated, the Applicant submits that no reference, alone or in combination, is seen to teach or suggest changing a spreading code based on a symbol rate for the lowest spreading gain user in a cell. The lowest spreading gain user of claims 10 and 20 is not interchangeable with the lowest symbol rate user of in claim 9. Spreading gain refers to the breadth of the channel over which data is spread, and is determined by the spreading codes themselves. Spreading gain is a measure of chips per bit of information; a higher spreading gain uses a code that spreads a bit of information over more chips than a code exhibiting a lower spreading gain. Lower spreading gain increases the overall data transmission rate; higher spreading gain, because it spreads data over a larger bandwidth, reduces interference protection. No reference is seen to describe changing/hopping spreading codes at a symbol rate (or multiple thereof) of a user selected by spreading gain, let alone the lowest spreading gain user. Claims 10 and 20 are seen to be novel and non-obvious over all cited art, and withdrawal of the rejections thereto is requested.

The Applicant respectfully requests that the Examiner review the cited art and rejections in light of the above amendments and remarks, and pass each of claims 3-6, 9-10, 13-16 and 19-26 to issue. The undersigned representative welcomes the opportunity to resolve any matters that may remain, formal or otherwise, via teleconference at the Examiner's discretion.

Respectfully submitted:



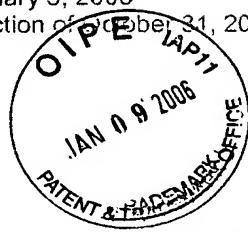
Gerald J. Stanton
Reg. No.: 46,008

January 5, 2006
Date

Customer No.: 29683
HARRINGTON & SMITH, LLP
4 Research Drive
Shelton, CT 06484-6212

Phone: (203) 925-9400
Facsimile: (203) 944-0245
Email: gstanton@hspatent.com

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